IN THE CLAIM

1   1. (Currently Amended) A method for allowing debugging capability in code

2   instrumentation that takes a block of original code to produce a block of

3   instrumented code, comprising the steps of:

4   providing an instrumentation breakpoint in the block of original code;

5   running the block of original code including the instrumentation breakpoint

6   until a breakpoint is reached;

7   determining whether the breakpoint is the instrumentation breakpoint; and,

8   if so, then generating the block of instrumented code when the

9   instrumentation breakpoint is reached;

10   running the block of instrumented code until a debugging breakpoint is

11   reached, and

12   performing debugging functions on the block of instrumented code at the

13   invoked reached debugging breakpoint.

1   2. (Original)   The method of claim 1 wherein the step of providing comprises the step of

2   replacing a first instruction in the block of original code by the instrumentation

3   breakpoint.

1   3. (Original)   The method of claim 2 wherein the first instruction comprises one or more

2   instructions.

1   4. (Currently Amended) The method of claim 2 wherein the step of generating further

2   comprises the step of restoring the first instruction to the block of instrumented

3   code.

1   5. (Currently Amended) The method of claim 1 ~~wherein the step of providing~~ <u>further</u>

2   comprises the step of providing a debugging breakpoint in either the block of

3   original code or the block of instrumented code.

1   6. (Currently Amended) A computer-readable medium embodying instructions that cause

2   a computer to perform a method for allowing debugging capability in code

3   instrumentation that takes a block of original code to produce a block of

4   instrumented code, the method comprising the steps of:

5   providing an instrumentation breakpoint in the block of original code;

6   <u>running the block of original code including the instrumentation breakpoint</u>

7   <u>until a breakpoint is reached;</u>

8   <u>determining whether the breakpoint is the instrumentation breakpoint; and,</u>

9   <u>if so, then</u> generating the block of instrumented code ~~when the~~

10   ~~instrumentation breakpoint is reached~~;

11   running the block of instrumented code until a debugging breakpoint is

12   reached, and

13   performing debugging functions on the block of instrumented code at the

14   ~~invoked~~ <u>reached</u> debugging breakpoint.

1   7. (Original) The computer-readable medium of claim 6 wherein the step of providing

2   comprises the step of replacing a first instruction in the block of original code by

3   the instrumentation breakpoint.

1   8. (Original) The computer-readable medium of claim 7 wherein the first instruction

2   comprises one or more instructions.

1   9. (Currently Amended) The computer-readable medium of claim 7 wherein ~~the step of~~

2   ~~generating~~ the method further comprises the step of restoring the first instruction

3   ~~to the block of instrumented code~~.

1   10. (Currently Amended) The computer-readable medium of claim 6 wherein the method

2   further ~~the step of providing~~ comprises the step of providing a debugging

3   breakpoint in either the block of original code or the block of instrumented code.

1   11. (Previously Added) The method of claim 2 wherein the debugging breakpoint being

2   referred to as a first debugging breakpoint and the first instruction being a second

3   debugging breakpoint.

1   12. (Previously Added) The method of claim 1 wherein the debugging breakpoint being

2   referred to as a first debugging breakpoint and the instrumentation breakpoint

3   being replaced by a second debugging breakpoint.

1   13. (Previously Added) The method of claim 1 wherein an instrumentor provides the

2   instrumentation breakpoint and information related to the instrumentation

3   breakpoint.

1   14. (Previously Added) The computer-readable medium of claim 7 wherein the debugging

2   breakpoint being referred to as a first debugging breakpoint and the first

3   instruction being a second debugging breakpoint.

1   15. (Previously Added) The computer-readable medium of claim 6 wherein the debugging

2   breakpoint being referred to as a first debugging breakpoint and the

3   instrumentation breakpoint being replaced by a second debugging breakpoint.

1   16. (Previously Added) The computer-readable medium of claim 6 wherein an

2   instrumentor provides the instrumentation breakpoint and information related to

3   the instrumentation breakpoint.